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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,695	09/04/2003	William H. Hanewinkel III	907A.0146.U1(US)	8571

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EXAMINER

SWIATEK, ROBERT P

ART UNIT	PAPER NUMBER
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3643

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,695

Applicant(s)

HANEWINKEL ET AL.

Examiner

Robert P. Swiatek

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-12,14-16,18-21,23,25 and 26 is/are rejected.
- 7) ☒ Claim(s) 2,3,13,17,22 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9-4-03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Fluegel (US 5,702,073: Ref. on page 2 of Information Disclosure Citation Form). The Fluegel patent discloses an aircraft component having a first section 20 attached to the exterior surface of the aircraft and a second section 14 in the form of a tube welded to and extending outwardly from the first section 20, the two sections together comprising a one-piece structure. Section 14 is deemed to constitute a heat transfer surface. While first section 20 doesn't close an access opening, it is *adapted* to do so. As to claim 5, the tube "passes" of second section 14 of Fluegel when this section has "flattened sides" (see column 4, line 7, of Fluegel) are considered to be fins.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fluegel. While first section 20 of Fluegel is clamped to the aircraft fuselage, to mount it thereon with rivets or

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other fasteners would have been obvious to one skilled in the art wishing to achieve a durable, long-lasting connection.

Claims 11, 12, 16, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Houf et al. (US 4,769,557). The Houf et al. enclosure includes electronic circuitry 12 disposed within a power switching housing 14 and atop a first wall member 64. A flange 68 with apertures extends from an outer periphery (considered to be a connection section) of the wall member 64; heat sink fins 66 project from an exterior of first wall member 64. The electronic circuitry of Houf et al. is capable of being employed within an aircraft.

Claims 14, 15, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houf et al. The precise nature of the circuitry used within the Houf et al. enclosure as well as the use of an EMI shield would have been obvious to one skilled in the art wishing to increase the versatility of the enclosure and ensure its operability under adverse conditions respectively.

Claims 20, 21, 23, 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Connolly et al. (US 5,184,141: Ref. on page 2 of Information Disclosure Citation Form). The Connolly et al. electronics assembly can be embedded within the leading edge 12 of a wing; it includes electronic components 50 as well as a contoured first side section 32 connected to the exterior of the airfoil. Inner skin/backplane member 44 of Connolly et al. is deemed to constitute a heat sink (see column 5, lines 28-32, of Connolly et al.).

Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Connolly et al. Element 44 of Connolly et al. is considered to be a heat sink inasmuch as the material comprising the electronics assembly is constructed from "thermally-conductive materials."

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Claims 6-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. In claim 6, it is unclear if the "housing" of line 4 is the same element recited as the "at least one other housing member" of line 7.

In claim 2, line 3, "which" should be deleted for clarity.

Claims 2, 3, 13, 17, 22, 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 6-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The disclosure is objected to because of the following informalities: On page 7, line 23, the phrase "and which lock (not shown) are used to connect" is unclear.

Appropriate correction is required.

The drawings are objected to because reference numeral "76" does not appear. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The patents to McCollum (US 2,441,279) and Beane (US 6,003,586) have been cited to provide additional examples of heat transfer devices.

RPS: 0703/308-2700
3 June 2004

Robert P. Swiatek
ROBERT P. SWIATEK
PRIMARY EXAMINER
ART UNIT 333 3643